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IN THE NEWS:

UNPRECEDENTED RAINS in Southern California resulting in calamitous floods, minor floods elsewhere, but water in the Mississippi River falling to low levels not reached in a half century, and over the northern part of the country temperatures lower than recorded in sixteen years, these are the striking contrasts in climatic conditions of the past weeks. As we go to press only fragmentary information is available as to the storm in California but they indicate that engineers will have to take new possibilities into consideration in that region when designing dams and flood channels and even bridges.

IN WASHINGTON, the PWA set up a new record for allotments from its fast disappearing fund. Allotments for non-federal projects reached 126, a new high, and money was provided for three unusually important river regulation projects—international work on the Rio Grande, an initial part of the long-discussed flood-control plan for Pittsburgh, and inauguration of a comprehensive flood control project in the Muskingum River Valley in Eastern Ohio. The latter two, by the way, are to be built by what a reader's recent inquiry erroneously called the "Corpse of Engineers"—a pretty lively body still.

ALLOTMENTS MADE by the PWA on Dec. 28, but not yet announced, it is stated in Washington, have exhausted the three billion dollar fund that Congress appropriated.

"THAT SLUM-CLEARANCE HOUSING is not competitive with private housing is accepted as fact in England," said Sir Raymond Unwin, British housing authority, at a meeting last week in New York. Over there it is also accepted that people who cannot afford privately-built housing must be housed by the government. One million houses have been built by municipal action since the War. "Your principal trouble in the United States," added Sir Raymond, "arises from your artifically high land values, resulting directly from speculation. In England, a profit from real estate is expected from earnings and not from resale. As a consequence, values are low, and best of all they are stable." The implications, while not stated, are plain.

IN THIS ISSUE:

MARITIME VESSELS plying in and out of Vancouver Harbor have long menaced the city's water-supply mains resting on the bottom of the harbor entrance. The danger was ended on June 30, 1933, when the new supply tunnel was placed in service. Shafts on either shore 400 ft. deep mark the ends of this tunnel. Design and construction comprise a notable story.

BECOMING RESTIVE under the seemingly high power and light rates charged by private utility companies, scores of towns are considering municipal operation. The PWA has encouraged them. A. W. Consper, backed by considerable experience in such matters, suggests a look—and a careful investigation—before a leap, not without reason.

REINFORCED-BRICK columns have a load capacity equal to that of a plain brick column plus the yield-point strength of the vertical reinforcement. Tests of 33 columns at Lehigh University furnish the basis for the statement.

WHEN WE HEAR that $700,000 is spent on a water-supply system that will be used only for construction purposes and then will be scrapped, we instinctively think of Boulder Dam. But this time it is something else—in fact the Colorado River Aqueduct. Desert conditions made this costly construction facility necessary; the Water District is building it because none of the many individual aqueduct contractors could afford to develop his own water supply.

NO DIAGONALS, no rivets, no visible machinery. These unusual characteristics of a new Japanese lift bridge are made possible respectively by Vierendeel truss design, electric welding and a compensated-cable operating system.

"SO LONG As there are heat units in sludge gas, they may be economically put to work," says W. B. Walraven, engineer of the Springfield (Ill.) Sanitary District, where nine months' operation of a compressor engine with sludge gas has proved highly profitable. Waste heat from the engine is also used in the digestion tanks.

THOSE WHO DELIGHT in unraveling the mysteries of long trigonometric equations will enjoy Robert E. Horton's development of an expression for discharge coefficients for tainter gates. To their enjoyment will be added the practical benefit of useful hydraulic information.

COMING ARTICLES:

SIGNIFICANT DEVELOPMENTS in the design of hydraulic structures for water-power plants are recorded in an article on the design of the Safe Harbor hydro-electric plant on the Susquehanna River, to be published next week. Simplification of details aids both in construction and in operation.

THE CWA as an emergency employment-relief measure has been a success. How was it organized in the various communities? How does it operate and with what efficiency? Pertinent facts are disclosed in an article to be published next week, based on a nationwide survey and personal visits by the editors.

SUCCESSFUL COMPLETION of a new pier and a quay wall on the waterfront at Saint John, New Brunswick, in spite of a 28-ft. tide that twice wrecked the huge cofferdam, characterized one of the outstanding construction jobs of the past year. The story of this difficult undertaking and of the unique pier design will be published shortly.

Annual Road Issue

HAS the $600,000,000 federal appropriation for emergency roadbuilding been wisely managed? How has it been handled? Has it increased employment? How are we to get money for future highway development? Answers to these questions are given in eight articles that will compose the contents of our Annual Road Issue, to be published January 18.